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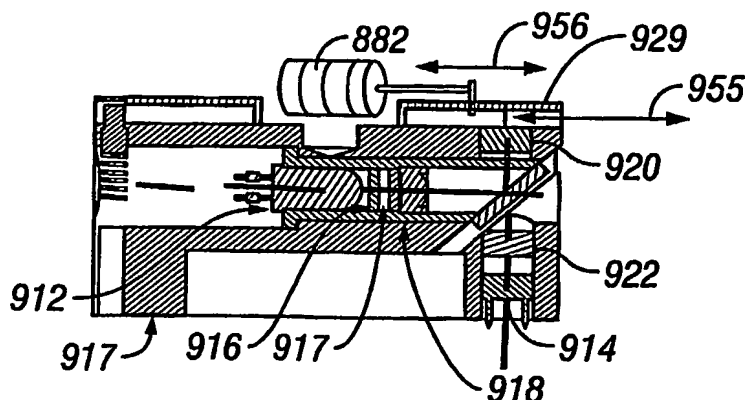
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(54) Title: METHOD AND APPARATUS USING OPTICAL TECHNIQUES TO MEASURE ANALYTE LEVELS



(57) Abstract: A device is provided for use with a tissue penetrating system and/or a metering device for measuring analyte levels. The device comprises a cartridge and a plurality of analyte detecting members mounted on the cartridge. The cartridge may have a radial disc shape. The cartridge may also be sized to fit within the metering device. The analyte detecting members may be optical system using fluorescence lifetime to determine analyte levels. In one embodiment, the device may also include a fluid spreader positioned over at least a portion of the analyte detecting member to urge fluid toward one of the detecting members. A plurality of analyte detecting members may be used. Each analyte detecting member may be a low volume device.

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